

CLAIMS:

1. A method for determining an unauthorized presence in a space to be protected comprising:

storing a voice list, wherein said voice list includes a plurality of voice patterns;

detecting a sound in said space, wherein said sound is indicative of a presence of at least one source of said sound in said space;

generating a current voice pattern from said sound;

comparing said current voice pattern with at least one of said plurality of voice patterns in said voice list to determine if said presence in said space is said unauthorized presence; and

initiating an alarm response if said presence in said space is said unauthorized presence.

2. The method as recited in claim 1 wherein each voice pattern of said plurality of voice patterns is generated from sounds of authorized users.

3. The method as recited in claim 2 wherein said authorized user includes either human or non-human.

4. The method as recited in claim 2 wherein said voice pattern is generated by pronouncing at least one of a first set of words of said authorized user.

- 1 5. The method as recited in claim 1 wherein said generating said current voice pattern from said sound includes using voice recognition to analyze said sound.
- 3 6. The method as recited in claim 5 wherein said comparing includes using said voice recognition to determine a first level of discrepancy between said current voice pattern and a content of said voice list, wherein said first level of discrepancy is determined based on first predetermined criteria.
- 4 7. The method as recited in claim 6 wherein said first level of discrepancy is used to determine if said presence in said space is said unauthorized presence based on said first predetermined criteria.
8. The method as recited in claim 1 wherein said alarm response includes at least one action of a plurality of actions, said action includes activating at least one device from a plurality of devices, and wherein if at least two actions of said plurality of actions are executed, said at least two actions are executed in a first sequence from a plurality of sequences based on second predetermined criteria.
9. The method as recited in claim 1 further comprising storing an emergency voice list, wherein said emergency voice list includes a plurality of voice codes, said each of said plurality of voice codes is generated by said sound of said authorized user, wherein if said current voice pattern corresponds to an entry in said emergency voice list, at least one predetermined action of said plurality of actions is initiated.
10. A system for providing security to a space by detecting an unauthorized presence in said space, the system comprising:

a first sensor configured to detect a sound in said space, wherein said sound is indicative of at least one source of said sound in said space, and wherein said source is indicative of a presence in said space;

a voice-processing unit coupled to said first sensor and configured to store a voice list, wherein said voice list includes a plurality of voice patterns, analyze said sound in said space, generate a current voice pattern from said sound detected by said first sensor, compare said current voice pattern with at least one of said plurality of voice patterns in said voice list to determine if said presence in said space is said unauthorized presence; and

a control unit coupled to said voice-processing unit and said first sensor and configured to initiate an alarm response if said presence in said space is said unauthorized presence.

11. The system as recited in claim 10 further comprises a first control device from a plurality of devices coupled to said control unit, wherein said first control device is used to perform a first control function.

12. The system as recited in claim 10 wherein each of said plurality of voice patterns includes at least a first voice of a plurality of voices, wherein said voice-processing unit generates first voice from said sound of an authorized user, and wherein said authorized user includes either human or non-human source of said sound.

13. The system as recited in claim 12 wherein said voice-processing unit generates each of said plurality of voice patterns by recording said sound of at least one of said authorized users.

14. The system as recited in claim 10 wherein said voice-processing unit uses voice recognition to recognize said sound, generate said current voice pattern from said sound, and compare said current voice pattern with a content of said voice list.

15. The system as recited in claim 14 wherein said voice-processing unit compares said current voice pattern with at least one of said plurality of voice patterns in said voice list to determine if said presence in said space is said unauthorized presence includes

using a first level of discrepancy between said current voice pattern and said content of said voice list, wherein said first level of discrepancy is based on first predetermined criteria, and wherein said first level of discrepancy is used to determine if said presence in said space is said unauthorized presence based on said first predetermined criteria.

16. The system as recited in claim 11 wherein said alarm response initiated by said control unit includes at least one action of a plurality of actions, wherein said action includes activating said at least one of said plurality of devices.

17. The system as recited in claim 16 wherein said control unit is further configured to execute at least two actions of said plurality of actions in a first sequence from a plurality of sequences based on second predetermined criteria.

18. The system as recited in claim 10 wherein said voice-processing unit is further configured to store an emergency voice list, wherein said emergency voice list includes a plurality of voice codes, wherein each of said plurality of voice codes is generated by said sound of said authorized user.

19. The system as recited in claim 18 wherein if said voice-processing unit determines that said current voice pattern corresponds to an entry in said emergency voice list, said control unit initiates at least one of predetermined actions from said plurality of actions.

20. The system as recited in claim 10 further includes a second sensor configured to detect a parameter other than said sound, said second sensor is coupled to said control unit, wherein said control unit is further configured to use an output of said second sensor to initiate a control action based on third predetermined criteria.